Application No.: 10/525,204

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A leather-like sheet product comprising a substrate which

contains a bundle of fine fibers, wherein

the substrate comprises:

(1) a first substrate layer having a structure that it is composed of an elastic polymer and

a bundle of fine fibers, and the elastic polymer surrounds the fiber bundle of fine fibers and is not

existent in the inside space of the fiber-bundle of fine fibers; and

(2) a second substrate layer (A) having a structure that it is essentially composed of a

bundle of fine fibers-; and

(3) the structure of the first substrate layer and the structure of the second substrate layer

(A) change continuously in the direction of thickness.

2. (cancelled).

3. (original): The leather-like sheet product according to claim 1, wherein a solid

surface layer, a porous surface layer or a composite surface layer consisting of a solid layer and a

porous layer is formed on the surface on the first substrate layer side of the sheet product.

4. (original): The leather-like sheet product according to claim 3, wherein the

surface layer has a thickness of 1 to 200 µm.

Application No.: 10/525,204

5. (original): The leather-like sheet product according to claim 1, wherein the

surface on the first substrate layer side is a suede-like surface.

6. (original): The leather-like sheet product according to claim 1, wherein the total

thickness of the first substrate layer and the second substrate layer (A) is 0.2 to 5 mm.

7. (original): The leather-like sheet product according to claim 1, wherein the fiber

bundle accounts for 40 to 80 % of the total space area of all the voids in the elastic polymer

surrounding the fiber bundle of the first substrate layer in the section perpendicular to the surface

of the leather-like sheet product.

8. (original): The leather-like sheet product according to claim 1, wherein the weight

ratio of the bundle of fine fibers to the elastic polymer in the first substrate layer is 10:90 to

50:50.

9. (original): The leather-like sheet product according to claim 1, wherein the bundle

of fine fibers is an assembly of 10 to 10,000 fine fibers having an average fineness of 0.0001 to

0.1 dtex.

10. (original): The leather-like sheet product according to claim 1, wherein the elastic

polymer in the first substrate layer is a polyurethane having a solubility in toluene of 15 wt% or

less.

Attorney Docket No.: Q86245

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/525,204

11. (original): The leather-like sheet product according to claim 1, wherein the elastic polymer in the first substrate layer is a porous elastic material.

12. (withdrawn-currently amended): A process for producing a leather-like sheet product according to claim 1, comprising the steps of:

applying a solution of an elastic polymer to one side of a sheet substantially composed of a fine fiber forming sea-island type fiber consisting of two or more components which differ from each other in solvent solubility to form an impregnated layer;

coagulating the elastic polymer; and

dissolving and removing the sea component by using a solvent which can dissolve the sea component of the sea-island type fiber.

- 13. (withdrawn): The process for producing a leather-like sheet product according to claim 12, wherein the elastic polymer is coagulated by a dry process.
- 14. (withdrawn-currently amended): A process for producing a leather-like sheet product according to claim 1, comprising the steps of:

applying a solution of an elastic polymer to both sides of a sheet substantially composed of a fine fiber forming sea-island type fiber consisting of two or more components which differ from each other in solvent solubility to form impregnated layers in such a manner that a non-impregnated layer is existent in the center portion of the sheet;

coagulating the elastic polymer;

dissolving and removing the sea component by using a solvent which can dissolve the sea component of the sea-island type fiber; and

Application No.: 10/525,204

slicing the sheet into two at the non-impregnated layer.

15. (withdrawn): The process for producing a leather-like sheet product according to

claim 12, wherein the elastic polymer is a polyurethane having a solubility in toluene of 15 wt%

or less.

16. (withdrawn): The process for producing a leather-like sheet product according to

claim 14, wherein the elastic polymer is a polyurethane having a solubility in toluene of 15 wt%

or less.

17. (currently amended): A leather-like sheet product comprising a substrate which

contains a bundle of fine fibers, wherein the substrate comprises:

(1) a first substrate layer having a structure that it is composed of an elastic polymer and

a bundle of fine fibers, and the elastic polymer surrounds the fiber bundle of fine fibers and is not

existent in the inside space of the fiber bundle of fine fibers, and having a density of 0.6 g/cm³ or

more, and a thickness of 10 to 200 µm; and

(2) a second substrate layer (B) having a structure that it is composed of an elastic

polymer and a bundle of fine fibers, the elastic polymer surrounds the fiber bundle and is not

existent in the inside space of the fiber bundle, and the total space area of all the voids in the

elastic polymer surrounding the fiber bundle is larger than that of the first substrate layer,; and

(3) the structure of the first substrate layer and the structure of the second substrate (B)

layer change continuously in the direction of thickness.

Application No.: 10/525,204

18. (original): The leather-like sheet product according to claim 17, wherein a solid surface layer, a porous surface layer or a composite surface layer consisting of a solid layer and a porous layer is formed on the surface of the first substrate layer.

- 19. (original): The leather-like sheet product according to claim 18, wherein the surface layer has a thickness of 1 to 200 μm .
- 20. (original): The leather-like sheet product according to claim 17, wherein the surface of the first substrate layer is a suede-like surface.
- 21. (original): The leather-like sheet product according to claim 17, wherein the total thickness of the first substrate layer and the second substrate layer is 0.2 to 5 mm.
- 22. (original): The leather-like sheet product according to claim 17, wherein the fiber bundle accounts for 40 to 80 % of the total space area of all the voids in the elastic polymer surrounding the fiber bundle of the first substrate layer in the section perpendicular to the surface of the leather-like sheet product.
- 23. (original): The leather-like sheet product according to claim 17, wherein the fiber bundle accounts for less than 40 % of the total space area of all the voids in the elastic polymer surrounding the fiber bundle of the second substrate layer in the section perpendicular to the surface of the leather-like sheet product.

Attorney Docket No.: Q86245

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/525,204

24. (original): The leather-like sheet product according to claim 17, wherein the weight ratio of the bundle of fine fibers to the elastic polymer in the first substrate layer is 10:90 to 50:50.

- 25. (original): The leather-like sheet product according to claim 17, wherein the bundle of fine fibers is an assembly of 10 to 10,000 fine fibers having an average fineness of 0.0001 to 0.1 dtex.
- 26. (original): The leather-like sheet product according to claim 17, wherein the elastic polymer of the first substrate layer is a polyurethane having a solubility in toluene of 15 wt% or less.
- 27. (original): The leather-like sheet product according to claim 17, wherein the elastic polymer of the first substrate layer is a porous elastic material.
- 28. (withdrawn-currently amended): A process for producing a leather-like sheet product according to claim 17, comprising the steps of:

impregnating a sheet composed of a fine fiber forming sea-island type fiber consisting of two or more components which differ from each other in solvent solubility with a solution of an elastic polymer (a);

coagulating the elastic polymer to form a fiber sheet material;

forming a surface layer composed of an elastic polymer (b) surrounding the seaisland type fiber in the surface layer without a space therebetween on the surface of the sheet material; and

Attorney Docket No.: Q86245

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/525,204

toluene of 15 wt% or less.

dissolving and removing the sea component by using a solvent which can dissolve the sea component of the sea-island type fiber.

29. (withdrawn): The process for producing a leather-like sheet product according to claim 28, wherein the elastic polymers (a) and (b) are each a polyurethane having a solubility in

- 30. (withdrawn): The process for producing a leather-like sheet product according to claim 28, wherein the elastic polymers (a) and (b) have an area change rate by toluene of their films of 5 % or less.
- 31. (withdrawn): The process for producing a leather-like sheet product according to claim 28, wherein the surface layer made of the elastic polymer (b) on the surface of the fiber sheet material is formed by lamination.
- 32. (new): The leather-like sheet product according to claim 1, wherein the first substrate layer has a thickness of 25-300 μm .
- 33. (new): The leather-like sheet product according to claim 1, wherein the first substrate layer is solid or independently porous.
- 34. (new): The leather-like sheet product according to claim 17, wherein the elastic polymer of the first substrate layer is a cross-linked elastic polymer.